KV-C2161D/C2561D/C2961D

RM-816

MODELS OF THE SAME SERIES	
KV-C2161D/C2561D/C2961D	
KV-C2551D/C2951D	
KV-X2551D/X2951D	

SPECIFICATIONS

【KV-C 2161 D, KV-C 2561 D, KV-C 2961 D】

Television system	B/G/H
Color system	PAL, SECAM, NTSC3.58, NTSC4.43
Stereo system	GERMAN stereo
Channel coverage	VHF: E2-E12 UHF: E21-E69
	CABLE TV (1) : S1-S41
	CABLE TV (2) : S 01-S 05, M 1-M 10, U 1-U 10
Picture tube	HI-Black Trinitron tube
	Approx. 54.5 cm (21 inches) (KV-C 2161 D)
	(Approx. 51 cm picture measured diagonally)
	100 ° degree deflection
	Approx. 63.5 cm (25 inches) (KV-C 2561 D)
	(Approx. 59 cm picture measured diagonally)
	110 ° degree deflection
	Approx. 72.4 cm (29 inches) (KV-C 2961 D)
	(Approx. 68 cm picture measured diagonally)
	110 ° degree deflection

Inputs / Outputs Terminals
REAR

21 pin Euro connector
(CENELEC standard)
- Inputs for audio and video signals
- Inputs for RGB
- Outputs of TV video and audio signals

2 / 21-pin Euro connector
- Inputs for audio and video signals
- Inputs for S-video
- Outputs for video and audio signals (selectable)

Audio output (variable) - phono jacks

FRONT

Video input phono jack

Audio inputs (L,R) phono jacks

S-video Inputs-4 pin DIN

Headphone jack : stereo mini jack

-Continued no next page-

TRINITRON® COLOR TV
SONY®

Sound output	15 W + 15 W
Power consumption	87 Wh (KV-C2161D)
	101 Wh (KV-C2561D)
	108 Wh (KV-C2961D)
Dimensions	Approx. 645 × 433 × 495 mm (w/h/d)
	(KV-C2161D)
	Approx. 720 × 497 × 480 mm (w/h/d)
	(KV-C2561D)
	Approx. 814 × 558 × 508 mm (w/h/d)
	(KV-C2961D)
Weight	Approx. 25kg (KV-C2161D)
	Approx. 38kg (KV-C2561D)
	Approx. 52kg (KV-C2961D)
Supplied accessories	RM-816 Remote Commander (1)
	IEC designation R6 batteries (2)

[RM-816]

Remote control system	infrared control
Power requirements	3V dc
	2 batteries IEC designation
	R6 (size AA)
Dimentions	Approx. 75 × 221 × 23mm(w/h/d)
Weight	Approx. 230g (including batters)
Accessories supplied	IEC designation R6 batteries (2)

Design and specifications are subject to change without notice.

21 pin connector (☺1 ⊡2)
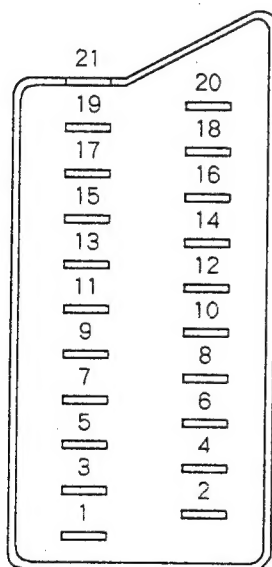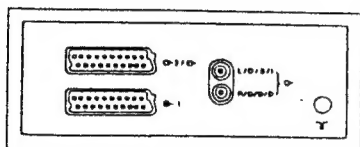
Pin No	1	2	4	Signal	Signal level
1	O	O	O	Audio output B (right)	Standard level : 0.5Vrms / Output impedance : Less than 1kohm *
2	O	O	O	Audio input B (right)	Standard level : 0.5Vrms / Input impedance : More than 10kohms *
3	O	O	O	Audio output A (left)	Standard level : 0.5Vrms / Output impedance : Less than 1kohm *
4	O	O	O	Ground (audio)	
5	O	O	O	Ground (blue)	
6	O	O	O	Audio input A (left)	Standard level : 0.5Vrms / Input impedance : More than 10kohms *
7	O	●	●	Blue input	0.7 ± 3dB, 75ohms, positive
8	O	O	O	Function select (AV control)	High state (9.5 – 12V) : Part mode / Low state (0 – 2V) : TV mode / Input impedance : More than 10kohms / Input capacitance : Less than 2nF
9	O	O	O	Ground (green)	
10	O	O	O	Open	
11	O	●	●	Green	Green signal : 0.7V ± 3dB, 75ohms, positive
12	O	O	O	Open	
13	O	O	O	Ground (red)	
14	O	O	O	Ground (blanking)	
15	O	–	–	Red input	0.7V ± 3dB, 75ohms, positive
	–	O	O	(S signal) croma input	0.3V ± 3dB, 75ohms, positive
16	O	●	●	Blanking input (Ys signal)	High state (1 – 3V) Low state (0 – 0.4V) / Input impedance : 75ohms
17	O	O	O	Ground (video output)	
18	O	O	O	Ground (video input)	
19	O	O	O	Video output	1V ± 3dB, 75ohms, positive Sy : 0.3V (– 3, +
20	O	–	–	Video input	1V ± 3dB, 75ohms, positive Sync : 0.3V (– 3, +
	–	O	O	Video Input/Y (S signal)	1V ± 3dB, 75ohms, positive Sync : 0.3V (– 3, + / 10dB)
21	O	O	O	Common ground (plug. shield)	

O Connected   ● unconnected (open)   * at 20Hz – 20kHz

4 Pin connector (⊡)

Pin No	Signal	Signal level
1	Ground	
2	Ground	
3	Y (S signal) input	1V ± 3dB 75ohm, positive Sync 0.3V $^{-3}_{+10}$ dB
4	C (S signal) input	0.3V ± 3dB 75ohm, positive

TABLE OF CONTENTS

CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.
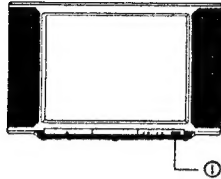
SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.
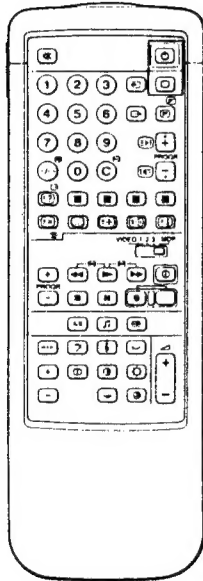
1-1. SWITCHING ON/OFF

After you have completed the basic preparation your TV is ready to be connected to the mains power supply (220/240V AC, 50Hz).

How to turn the TV on

Action	Result
Press ① on the TV.	The TV will turn on. **Note:** If the screen remains blank, the TV may be in the standby mode. Press ○ or any number button on the commander to switch it on.

How to turn the TV off

A Temporarily	
Press ⏻ to enter standby mode.	The TV will be in standby. To return to the TV mode press ○

B Completely	
Press ① on the TV.	The TV will turn off.

— 4 —

1-2. PRESETTING

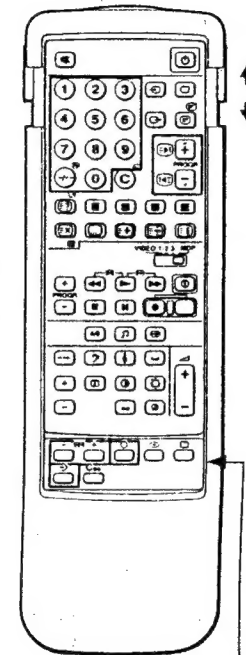After you have installed this TV you need to preset TV channels.

TV stations broadcast their channels at certain frequencies. You must preset these channels to programme numbers on this TV before you can watch the TV programmes.
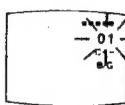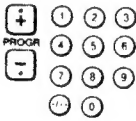
There are 60 spaces for storing these channels.
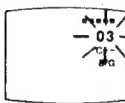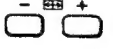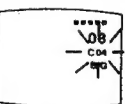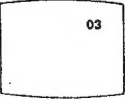
Slide open the full function side of the remote commander to reveal preset buttons.

How to preset channels automatically

If you are unfamiliar with the channel numbers of the stations you wish to preset, use "How to preset channels automatically". If you are familiar with the channel numbers refer to "How to preset T.V. channels directly".

Note: These buttons should be used in preset mode only.

Action	Result
1 Press ⇨ to enter the preset mode.	The programme number will start flashing.
2 Press PROGR + or - or the number buttons to select the programme number to which you want to preset channels. **Note** To select a double-digit number, use the -/-- button. For example, if you want to choose 23, press -/--, 2, and then 3.	The programme number changes
3 Press ⊞ + or - once to search forward or backward for channels.	When a channel is tuned in, the search will stop. **Note** If you want to skip a channel, press ⊞ + or ⊞ -.
4 Press ◇ if you want to store the channel which is tuned in. Press ⇨ to exit preset mode without storing.	03 The channel is now stored and you have returned to TV mode.
5 Repeat steps 1 to 4 to store the other channels.	

How to preset channels directly

Action	Result
1 Press ⊃ to enter the preset mode.	— 03 — The programme number will start flashing.
2 Press PROGR +/- or the number buttons to select the programme number on which you want to preset a channel.	— 01 — The programme number changes.
Note To select a double-digit number, use the -/-- button. For example, if you want to choose 23, press -/--, 2, and then 3.	
3 Press C. If you want to select a cable channel, press C twice.	The indication "C--" ("S--" for a cable channel) starts flashing on the display.
4 Select the channel number with two digits (e.g. 04) by pressing the number buttons.	The channel number changes. **Note** If you have made a mistake the letter "X" will appear. Repeat step 4 again.
Note Press the second number within 5 seconds after the first one, otherwise the operation will be cancelled.	
5 Press ◇ to store the channel which is tuned in. Press ⊃ to exit the preset mode without storing.	01 The channel is now stored and you have returned to TV mode.

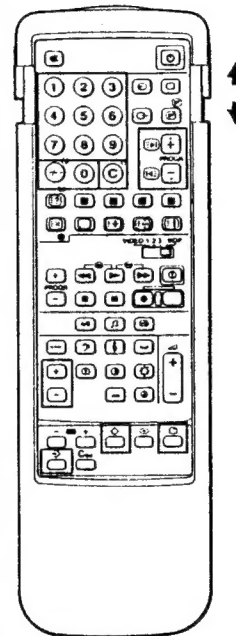Repeat steps 1 to 5 to store the other channels.

How to Name a Station

You can use up to five characters to "name" a channel or station (i.e. BBC1).

Action	Result
1 Select a programme number you want to name by pressing the PROGR +/- or the number buttons	08 The selected programme number will appear.
2 Press ⊃.	— 01 — The programme number starts flashing.
3 Press ◯.	08 The first column of the station name indication will start flashing.
4 Press + or – to select a letter in the alphabet, a number, or a blank space.	08 The letters of the alphabet, numbers and the space ("-") will appear sequentially.
5 Press ◯.	08 The first character is now set and the second column will start flashing.
6 Repeat steps 4 and 5 to set each letter.	
7 Press ◇.	SONY 08 The channel name is now stored and you have returned to TV mode.

How to tune in a channel temporarily
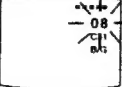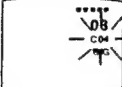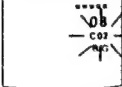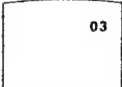
You can tune a channel in temporarily, if it has not been preset.

Action	Result
1 Press C. For cable channels, press C twice.	The indication "C" ("S" for cable channels) appears on the screen.
2 Select the channel number with two digits by pressing the number buttons (e.g. for channel 4, first press 0, then 4.)	The channel is received, but it is not stored to any programme number.

How to Skip Programmes

Using the PROGR +/- buttons you can skip unused programme channel numbers. However, the skipped numbers may still be called up using the number buttons.

Action	Result
1 Press ⊕ to enter the preset mode.	The programme number will start flashing.
2 Select the programme number that you want to skip by pressing PROGR +/- or the number buttons.	The programme number changes.
3 Press Coo.	The lowest channel number appears under the programme number.
4 Press ◇.	The channel is now stored and you have returned to TV mode.

Repeat steps 1 to 4 to skip other programme numbers.

How to Fine Tune Manually

If the picture is distorted, you can fine tune the channel manually.

Action	Result
Press ⊞ + or – repeatedly until the picture looks normal.	The indication ← F → appears on the screen.
Press ⊕ to enter the preset mode.	The programme number starts flashing.
Press ◇.	The fine tuning is stored.

Note: The automatic fine tuning will function again when you preset the channel once more.
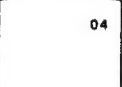
Note: Press ⊥ on door to open.

P→⊿→⊕ →•← +
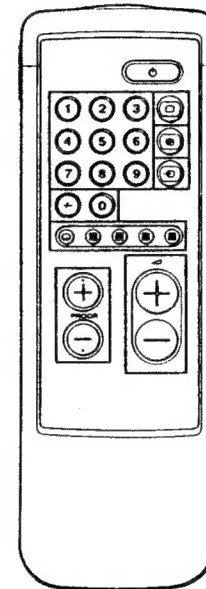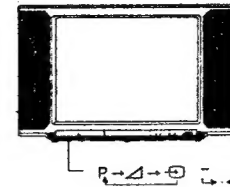
This section introduces you to the basic control functions which are available on the simple side of the remote commander.

How to Select Programmes

Before you can select programmes make sure that you have preset channels.

Action	Result
Press PROGR +/- or the number buttons. To select a double-digit number, use the -/-- button. For example, if you want to choose 23, press -/--, 2, and then 3.	04 — The selected programme is displayed.

How to Adjust the Volume

Action	Result
Press ⊿ + or –.	The volume markers will appear.

How to Use Additional Functions

How to operate with the buttons on the TV
You can also select programmes and adjust the volume using the P→⊿→⊕ and →•← +/- buttons on the front of the TV.
For operation, first press the P→⊿→⊕ button repeatedly so that the P (for programme) or ⊿ (for volume) indication appears on the screen, and then adjust with the →•← +/- buttons.

How to view the teletext
Press ⊜. To return to the TV mode, press ○.
For details about the teletext operation.

How to view the video input picture
Press ⊕ To return to the TV mode, press ○. For further details.

1-4. ADVANCED TV OPERATION

This section shows you how to use convenient features and how to adjust the picture and sound to your taste.
Use the full-function side of the Remote Commander.

How to use on-screen display and special sound features

You can enjoy the following convenient features.

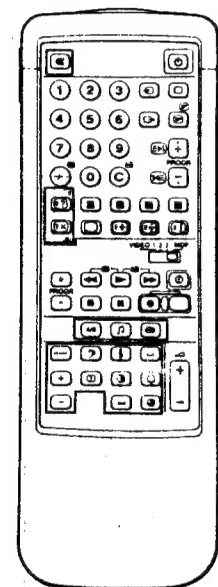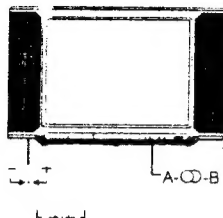| How to	Action	To resume normal picture/sound
Display on-screen indications	Press ⊡	Indications disappear after some seconds
Display programme numbers	Press ⊡ twice	Press ⊡ twice again.
Mute the sound	Press ⊠	Press ⊠ again.
Select a language in bilingual programmes	Press A/B. The selected mode of the A-⬭-B indicator on the TV lights up.	Press A/B.
Set the sound to music listening position	Press ♫.	Press ♫ again.
Use the space sound (special acoustic effect)	Press ⊕	Press ⊕ again.
Request the time	Press ⊙	Press ⊙ again.

How to adjust the picture and sound

Although the picture and sound have been adjusted at the factory, you might want to adjust them to your own taste. To do this, please follow the steps.
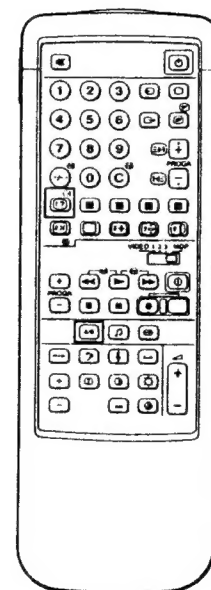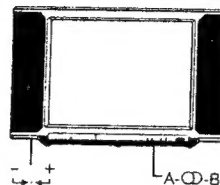
For picture adjustment

To Adjust:	Press:	Then:	Result: (+ ⟷ −)
Picture:			
Colour Intensity	◑		More ⟷ Less
Picture Contrast	◑	⊞	More ⟷ Less
Brightness	☼		Bright ⟷ Dark
Hue (for NTSC only)	⊠	⊟	Reddish ⟷ Greenish
			Sharp ⟷ Soft
Sound:			
Bass	♪	⊞	More ⟷ Less
Treble	♪		More ⟷ Less
Balance	⊠	⊟	More Right/More Left

To reset the picture and sound to factory set levels press ➔ · ⬅.

On the set:
Press ➔ ·⬅ +/− buttons simultaneously.

How to select a NICAM broadcast

This Sony TV has been designed to select Nicam broadcasts when available.
Whenever a Nicam broadcast is received, the ⊠ symbol appears briefly on the screen. When the Nicam programme ends, or you switch channels to one without Nicam, the ⊠ symbol appears. To check if the channel you are watching is receiving Nicam, press the on screen display button ⊡ on the full function side of the remote commander.

How to select the sound of your choice

Nicam programmes can be broadcast in three ways. You may select the sound you want to hear in each of these, by pressing the ⊟ button on the full function side of the remote commander.

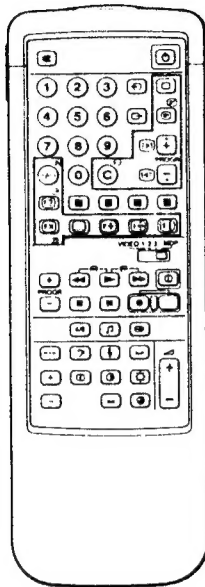| Nicam service being broadcast	Action	The sound you hear	Indication on the TV A⬭B
Stereo		Stereo	
	Press A/B	Normal	
	Press A/B again to return to stereo		
Mono		Mono	
	Press A/B	Normal	
	Press A/B again to return to Nicam mono.		
Bilingual		Language A	
	Press A/B	Language B	
	Press A/B	Normally broadcast language	
	Press A/B again to return to language A		

* Depending on availability of service.

1-5. TELETEXT OPERATION

TV stations broadcast teletext programmes via the TV channels. To receive teletext programmes, use the buttons indicated in green on the full side of the Remote Commander.
With the simple side of the Remote Commander, only the basic operation is possible.

How to View the Teletext

	Action	Result
1	Select the channel which carries the teletext service you wish to see.	The channel changes on the screen.
2	Press ⊜.	Teletext will appear. If the teletext signal is not broadcast, then **p100** is displayed.
3	Input three digits for the page number using the number buttons. **Note** If you make a mistake, type in any three digits, then re-enter the correct page number.	The numbers are entered on the screen. The requested page will appear in a few seconds.

To return to the TV mode.
Press ○.

To change the teletext channels
First press ○ to return to the TV mode, then repeat steps 1 to 3.

Note
If the signal of the TV channel is weak, teletext errors may often occur.

How to Use the Advanced Features of Teletext

How to	Action	Result (On-screen display)
Request the index page.	Press ⊞ (INDEX).	The index page appears.
Request the subtitle page (p888).	Press ○.	The subtitle page is displayed (p888).
Access the next or preceding page.	Press ⊟ (PAGE +) or ⊟ (PAGE –).	The next or preceding page appears.

How to	Action	Result
Superimpose the teletext display on the TV programme.	Press ⊜ once if you are in text mode, or press ⊜ twice if in TV mode. To return to the normal teletext display press ⊜ again.	The teletext displays are superimposed on the TV programmes.
Prevent a teletext page from being updated or changed.	Press ⊞ (HOLD). To resume normal teletext reception, press ⊜ (TEXT/MIX).	The HOLD symbol (⊞) appears on the screen and the chosen sub-page is held until you cancel.
Enlarge the teletext display.	Press ⊟ once to enlarge the upper half. Press twice to enlarge the lower half. Press again to restore the normal display.	The upper half is enlarged.
Reveal concealed information (e.g. answers to a quiz).	Press ⊟ (REVEAL). Press again to conceal the information.	The information is revealed.
Watch the TV programme while waiting for a requested page to be displayed.	1. Request a new page.	The numbers are entered.
	2. Press ⊟ (TEXT CL).	The TV program is displayed, and the requested page number and other teletext data appear at the top of the screen.
	3. When the requested page has been captured, the page number remains and the other data disappears.	**P201**
	4. Press ⊜ to view this page.	The requested page is displayed.
Have a requested page displayed at a pre-determined time.	1. Request a desired page.	The requested page is displayed.
	2. Press ⊟ (TP ON).	"T****" appears at the bottom of the screen.
	3. Enter the time you want to have the page displayed with four digits using the number buttons. (For example, enter 0730 for 7:30 AM.)	The time is entered on the screen.
	4. Press ⊟ (TEXT CL) to watch the TV programme until the requested time.	At the requested time, the page number will be displayed at the top of the screen, to view this page, press ⊜.
	To cancel the request Display the teletext page, then press ⊠ (TP OFF).	The request is cancelled. To resume TV mode press ○.

Some of the features may not be available depending on the Teletext service.

How to use the FASTEXT Feature

FASTEXT feature allows you to access pages quickly with one key operation.
When a FASTEXT page is broadcast, a colour coded menu appears at the bottom of
the screen. Each coloured prompt corresponds to the coloured buttons on either side
of your Remote Commander.

Operation

Action	Result
Press one of the coloured buttons which corresponds to the coloured prompt on the teletext.	The selected teletext page appears.

Note

Correct FASTEXT operation depends on the necessary signals sent from the TV
station.
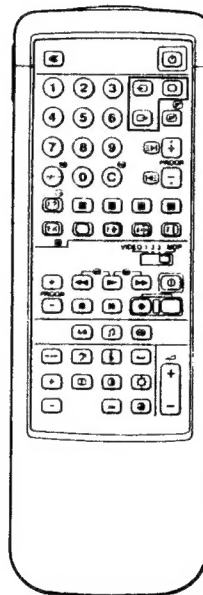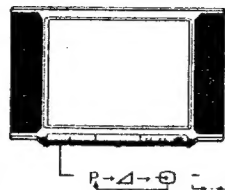
How to view the video input picture

You can view the picture of video equipment connected to the input terminals by
selecting the input mode.

Operation

Action	Result	
Press ⊖ repeatedly to select the desired input.	⊖1	Symbol for the selected input appears. (See the table below.)

To return to the TV mode, press the ○ button.

Input modes

Symbol	Result
⊖1	Audio/video input through the ⑤ connector.
⊖	RGB input through the ⑤ connector.
⊖2	Audio/video input through the ⊖2/ ⑤ connector.
⊖2	S video input (from a VTR equipped with an S video output) through the ⊖2/ ⑤ connector.
⊖3	Audio/video input through ⊖ and ⊖ jacks on the front.

You can also select the input mode using the P → △ → ⊖ button on the TV.
In this case, first select ⊖ and then press +/− buttons to select the input.

How to select the Output

The ⊖2/ ⑤ connector outputs four kinds of audio/video signals. You have to select
one of them as follows.

Operation

Action	Result	
Press ⊖ repeatedly to select the desired input.	1⊖	Symbol for the selected output appears. (See the table below.)

Output modes

Symbol	Output from
1 ⊖	The audio/video signal from the ⑤1 connector
2 ⊖	The audio/video signal from the ⊖2/ ⑤ connector
3 ⊖	The audio/video signal from the ⊖ ⊖ connectors.
TV ⊖	The audio/video signal from the T aerial terminal.